

CLAIMS:

Sub P1 1. Communication system, comprising a network, one or more optical transmitters and potential noise sources, characterized in that the communication system comprises filter means coupled between the noise sources and the at least one optical transmitter, which filter means have a cut-off frequency, dependent on the noise frequency.

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2. Communication system according to claim 1, characterized in that the cut-off frequency of the filter means lies around 10 to 15 MHz.

A 3. Communication system according to claim 1 or 2, characterized in that the filter means are arranged as a high pass filter and/or a low pass filter.

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4. Communication system according to *claim 1*, characterized in that the filter means are arranged as adaptive filter means, such that if impulse noise arises it is being blocked from passing upstream through the communication system.

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5. Communication system according to claim 4, characterized in that the communication system comprises a threshold detector and a controllable switch having a control input coupled to the threshold detector.

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6. Communication system according to claim 5, characterized in that the communication system comprises a summing device for summing at least one filtered version of an impulse noise containing RF signal.

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7. Filter means for application in the communication system according to *one of the claims 1-6*, characterized in that the filter means have a cut-off frequency, which is chosen in dependence on the noise frequency.

8. Filter means according to claim 7, characterized in that the cut-off frequency of the filter means lies around 10 to 15 MHz.